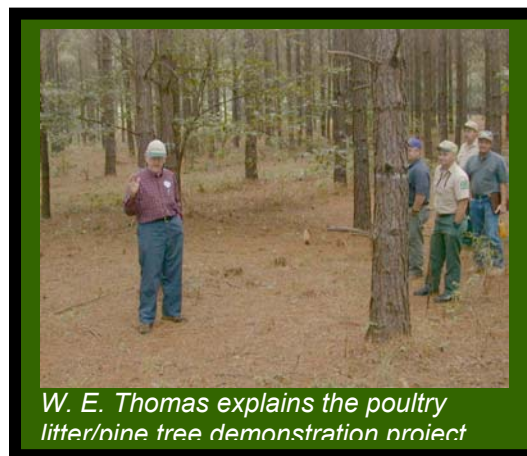


Conservation On the Ground - Poultry Litter/Pine Tree Demo



In the world of agriculture in Alabama, poultry and timber rank at the top of our list. Disposal of poultry litter in Alabama is a real issue. As the population increases, the problem will also increase. Since there is an abundance of poultry litter and an abundance of timber, is there a possibility that poultry litter could be used to promote the growth of pine trees? That was exactly the question the Chambers County Forest Planning Committee decided to address when they established a series of test plots on timberland owned by W. E. Thomas.

Mr. Thomas purchased the property in 1980. In the fall of 1987, he purchased a tree planter, prepared the soil, and laid off the rows; in 1988 he planted the trees. In 1998 he thinned the trees. In the winter of 1999, the Coosa Valley Resource Conservation and Development (RC&D) Council suggested that the Chambers County Forest Planning Committee have a demonstration site for spreading of poultry to promote pine tree growth. Mr. Thomas' plantation was poised for the demo site.



The objectives of the demonstration were: 1) To determine what would promote pine tree growth, and 2) To determine if forestland would be a good source for disposal of chicken litter. The Coosa Valley RC&D Council and Natural Resources Conservation Service (NRCS) provided funding and NRCS and Auburn University provided the technical assistance to conduct the demonstration.

The test site included three treatments replicated three times: chicken litter, DAP/Urea/Potash fertilizer, and untreated sites. Chicken litter was spread at a ratio of 4 tons per acre and fertilizer of a comparable

nutrient ratio was applied to the fertilized sites.

While the participants were not researchers, their work showed trends that after three years, tree growth in the chicken litter and mineral fertilized sites surpassed tree growth on the non-treated sites. There was no appreciable difference in wildlife habitat.

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The conclusions of the project suggest that:

- Fertilized trees tended to produce more volume growth than those not fertilized
- Poultry litter and mineral fertilizer caused similar response
- There were no adverse visible effects on pine trees fertilized with poultry litter
- Understory vegetation increased with fertilizer application

Things to consider for poultry litter application:

- Tree plantation layout (the layout must be accessible to spreaders)
- Cost/benefits
- Timing of application
- Adjacent sensitive areas such as wetlands or streams
- Proximity of neighbors
- Soil type and landscape

While poultry litter and timber production seems to be compatible, it boils down to the issue of cost/benefits for the producer.

The Coosa Valley RC&D Council and the Chambers County Soil and Water Conservation District hosted a tour of the demonstration site on September 24, 2002, and presented the conclusions of the project.